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10/712,659	11/13/2003	Francis Bourrieres	N48.2I-11373-US01	2594
499 7590 05/12/2009 VIDAS, ARRETT & STEINKRAUS, P.A. SUITE 400, 6640 SHADY OAK ROAD EDEN PRAIRIE, MN 55344				
EXAMINER				
JOHNS, CHRISTOPHER C				
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3621				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/712,659

**Applicant(s)**

BOURRIERES ET AL.

**Examiner**

Christopher C. Johns

**Art Unit**

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgements***

1. This Office Action is given Paper No. 20090508 for reference purposes only.
2. This Office Action is in response to the Response to Non-Final of 17 February 2009.
3. All references to the capitalized version of "Applicant" refer specifically to the Applicant or Applicants of record in the instant application. Any references to lowercase versions of "applicant" or "applicants" refer to any or all patent applicants. Unless expressly noted otherwise, references to the capitalized version of "Examiner" refers to the Examiner of record while reference to or use of the lower case version of "examiner" or "examiners" refers to examiner(s) generally. The notations in this paragraph apply to any future Office actions from this Examiner.
4. Claims 1-4 and 9 are pending.

### ***Claim Objections***

5. Claims 1-4 and 9 are objected to because of the following informalities: claim 1 recites "if there is agreement"; it is not immediately clear what the "agreement" is referring to, and it is believed that this may be a typographical error. It is assumed that this is supposed to mean an agreement between the "identifier...and its image displayed on the terminal and/or on the receipt of the printer".
6. Furthermore, independent claim 1 does not follow the convention of separating distinct elements/steps of the claims with line spacing or line indentations. For example, claim 1 contains at least 3 distinct elements in the fourth set of steps ("call is made to the database,"

“stored image is re-transmitted,” and “operator makes a visual comparison between the identifier...”); however, the claim as presented fails to delineate these elements in accordance with 37 CFR §1.75(i).

7. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over United Kingdom Patent 2,304,077 ("Farrall"), in view of US Patent 5,657,389 ("Houvenner"), further in view of United States Patent 6,584,214 ("Pappu").

10. As per claim 1, Farrall discloses:

11. a unique...identifier...physically integrated in the medium comprising a number (page 2, paragraph 6 – “relies on a signature set derived from a totally random feature – the presence of shiny metallic particles randomly distributed in three dimensions throughout the very fabric of the device which is conveniently illustrated in the form of a card”);

12. identifier constitutes an unforgeable link (page 3, paragraph 2 – “Anyone attempting to duplicate a card made by the Crystal Chip process faces the problem of duplicating the exact individual distribution – and orientation – of possibly hundreds of minute metal fragments”) between the number and information stored under the same number in a database (page 9,

paragraph 1 – “purpose of this system is the identify the card offered and to compare its Crystal signature with the card holder details held on file”);

13. stored information comprises at least one representation of the identifier comprising an image of the unique identifier (page 9, paragraph 1 – “purpose of this system is the identify the card offered and to compare its Crystal signature with the card holder details held on file”).

14. Farrall does not disclose:

15. a call is made to the database, the stored signature is re-transmitted to a terminal monitor and/or a printer on which the image appears, an operator makes a visual comparison between the identifier located on the medium and its signature displayed on the terminal and/or on the receipt of the printer; or

16. that the identifier is a volume-based identifier containing bubbles of random size, shape, and arrangement which are clearly perceived in form size and relative position.

17. Houvener discloses:

18. a call is made to the database (column 7, lines 12-20), the stored signature is re-transmitted to a terminal monitor and/or a printer on which the image appears (see figure 1, reference numbers 2, 6, 6'; column 6, lines 49-50: "display the information on display means"), an operator makes a visual comparison between the identifier located on the medium and its image displayed on the terminal and/or on the receipt of the printer (The operator must "visually compare the image displayed on the display means with the...signature of the person presenting the credit card at the point of verification" (column 6, lines 60-65));

19. Houvener performs this to positively identify identities of users holding cards, and to prevent fraud and misuse of financial information and resources, something that a person having ordinary skill in the art would see as advantageous.

20. Therefore, it would have been obvious to a person having ordinary skill in the art to include in Farrall the user-verification system as taught by Houvener, since the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately. A person having ordinary skill in the art would have recognized that the results of the combination were predictable, as well as advantageous because it would create a more secure payment system.

21. Pappu teaches:

22. that the identifier is a volume-based identifier containing bubbles of random size, shape, and arrangement which are clearly perceived in form size and relative position (column 2, lines 55-65 - "voids or bubbles may be introduced into a polymeric matrix as it cures, resulting in a three-dimensional network of features").

23. The identifiers are compared to pre-stored "validating indicia" (see especially claim 1), in order to validate their authenticity (as well as the document that it is attached to). This is done in order to generate a "unique identifier" (Abstract) for documents in order to better identify them and their authenticity.

24. The sole difference between the reference and the instant application is that the reference does not disclose a bubble identifier in place of reflective particles. Since each individual identification system and its function are shown in the prior art (though in different references),

the difference between the claimed subject matter and the prior art rests not on an individual element or function, but the combination itself – that is, in the substitution of a bubble identifier in Farrall. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Pappu's bubble identifier in place of Farrall's reflective particles, because the simple substitution of one known element for another, producing a predictable result, renders the claim obvious.

25. As per claims 2-4, Farrall discloses:

26. number recorded on the medium by means of a magnetic strip or tape, number recorded in the medium by means of a linear bar code or two-dimensional code, number recorded on the medium by means of an electronic chip or radio frequency chip (these features are all inherent and/or were extremely well-known to those skilled in the art of smart/credit cards at the time of the invention, which are in use in the system in Farrall).

27. As per claim 9, Farrall teaches:

28. bubbles are self-generated (Pappu, claim 2 - "structure is inhomogeneous"; also, the bubbles are inherently formed in some way).

### ***Claim Interpretation***

29. In accordance with MPEP §2111, the Examiner has interpreted the meaning of claim limitations in accordance with their "broadest reasonable interpretation", unless such terms have been defined explicitly in the specification.

30. The Examiner hereby adopts the following definitions under the broadest reasonable interpretation standard. In accordance with *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997), the Examiner points to these other sources to support his interpretation of the claims. Additionally, these definitions are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

31. ***Make***: “to cause to happen or exist”; Webster’s New Basic Dictionary, 2007;  
32. ***Visual***: “Of or relating to the sense of sight”; *Id.*

#### ***Response to Arguments***

33. Applicant’s arguments filed 17 February 2009 have been fully considered but they are not persuasive.

34. The crux of Applicant’s arguments are on pages 2-4. Applicant asserts that “Pappu actually provides objective evidence of the non-obviousness of the claimed invention” (emphasis removed) (page 3, first sentence after Pappu citation), due to the complex mathematical formula utilized to calculate the correlation between the expected and the actual patterns. Applicant further asserts that as Pappu uses a computer to calculate the correlation between the authentication device and the reference “expected pattern”, the claim language is not met.

35. The Examiner disagrees. The claim language that this is referring to is “makes a visual comparison between the identifier located on the medium and its image displayed on the terminal” (claim 1, lines 13-14). However, in view of the above accepted definitions of “make” and “visual”, it is shown that the claim language is met, as the operator invokes the computer to

perform the comparison (column 3, line 45 - column 4, line 10), and the comparison is a visual one (anything involving light or visible artifacts is "visual"). Therefore, the claim language is met.

### ***Conclusion***

36. Examiner's Note: Although Examiner has cited particular columns, line numbers and figures in the references as applied to the claims above for the convenience of the applicant(s), the specified citations are merely representative of the teaching of the prior art that are applied to specific limitations within the individual claim and other passages and figures may apply as well. It is respectfully requested that the applicant(s), in preparing the response, fully consider the items of evidence in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

38. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher C. Johns whose telephone number is (571)270-3462.

The examiner can normally be reached on Monday - Friday, 9 am to 5 pm.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on (571) 272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher C Johns/  
Examiner, Art Unit 3621

/EVENS J. AUGUSTIN/  
Primary Examiner, Art Unit 3621